Listing of Claims

1. (Currently amended) A method comprising transferring a pattern from an elastic stamp to a substrate in the presence of a third medium, the step of transferring comprising: bringing the stamp into contact with the substrate while controlling a layer of the third medium between the stamp and the substrate to a predetermined thickness, and guiding excess third medium away from the surface of the stamp,

wherein the substrate is rigid,

wherein the substrate is impermeable,

wherein the third medium comprises one or more of gas, water, solvent, polymer, emulsion, and sol-gel precursor,

wherein the step of controlling comprises avoiding trapping of the third medium via the stamp matrix being permeable to the third medium,

wherein the step of controlling comprises allowing a nanometer sized gap in the stamp to get filled with the excess third medium,

wherein the step of controlling comprises providing a patterned stamp surface having channels to drain the excess third medium,

wherein the step of controlling comprises filling vias and recesses formed in the stamp with a component having an affinity for the third medium,

wherein the component is hydrophilic,

wherein the component comprises a gel,

wherein the gel is swellable by the third medium,

wherein the step of controlling comprises swelling the gel with the third medium to form protrusions in the stamp,

wherein the step of controlling comprises providing an array of protrusions and recessed zones in the stamp,

wherein the excess third medium is guided away from the surface of the stamp via the recessed zones,

wherein the array comprises a micrometer-sized pattern subdivided into smaller structures,

wherein the smaller structures are separated by smaller drainage channels,

wherein the smaller drainage channels are connected to a network of larger drainage channels,

wherein the excess third medium is trapped in a shallow lense-like pocket between the stamp and the surface of the substrate, and

wherein the channels define molecular sized gaps between the stamp and the substrate.